#### MEMORANDUM

**DATE:** February 25, 2000

TO: Tom Bell, Mohandas Bhat, Frank Hawkins, Ruth Neta, Joe Weiss, Libby White,

and Paul Seligman

FROM: Barrett Fountos

**SUBJECT:** Summary of the February 24, 2000 Meeting of the Advisory Committee for

Energy-Related Epidemiologic Research (ACERER) Subcommittee for

Management Review of the Chernobyl Studies

The fourth meeting of the Subcommittee was held at the Omni Shoreham Hotel, Washington, D.C. The purpose of the Subcommittee is to provide guidance to the scientific reviewers and staff and to report back to ACERER on the charge from the Department of Health and Human Services (DHHS) and Congress to assess the management, goals, and objectives of the National Cancer Institute (NCI) Chernobyl studies.

The meeting was chaired by ACERER member Dr. Genevieve Matanoski, Johns Hopkins University. Mr. Michael Sage, National Center for Environmental Health (NCEH), attended as the U.S. Government Representative, as required by the ACERER Charter. ACERER member Dr. John Bagby was present; Dr. Genevieve Roessler and Mr. Richard Schultz were absent. Mr. Schultz, Idaho Department of Health and Welfare, was appointed to replace ACERER member Dr. Jack Geiger on this Subcommittee. Dr. Geiger resigned from this Subcommittee for health reasons, but will continue to serve on ACERER. Besides me, observing the meeting were Dr. Michael Donnelly and Ms. Priscilla Patin, NCEH, Mr. Art Schletty, consultant to NCEH, Mr. Larry Elliott, National Institute for Occupational Safety and Health (NIOSH), Ms. Lisa Ledwidge, Institute for Energy and Environmental Research, Ms. Cindy Folkers, Nuclear Information and Resource Service, and Ms. Kathy Crandall, Alliance for Nuclear Accountability.

#### **Background:**

During the last several years, DOE and others raised concerns about the lack of progress of the Chernobyl studies managed by NCI. As a result of the NCI report on radiation fallout across the United States from U.S. nuclear weapons testing, questions were raised about the distribution and effects of the fallout on the public. An unfinished part of the report, the status of the Chernobyl studies, raised additional questions from the public and advocacy groups because the report indicated that data from the Chernobyl studies could be used to assess the risk of adverse health effects from exposure to fallout from U.S. nuclear weapons testing.

Consequently, Congress asked the Secretary, DHHS, to investigate the conduct, management, and science of the NCI Chernobyl studies. The focus of the investigation is the Belarus and Ukraine thyroid studies and the Ukraine leukemia study. Dr. William Raub, Deputy Assistant

Secretary for Science Policy, DHHS, received the assignment and funds to determine how to fulfill Congress's request for a DHHS review of the Chernobyl studies. When it was decided that ACERER would have the leading role, an ACERER subcommittee was formed to perform an independent assessment. The February 24 meeting was one of a series of monthly meetings in preparation for a final report to the Secretary, DHHS, by May 1, 2000.

#### Highlights of the Discussion:

The majority of the meeting served as an opportunity for exchange between the Subcommittee and public interest group observers. The remaining time was used to discuss next month's interviews in Belarus and Ukraine.

After everyone introduced themselves, Mr. Schletty briefed the public interest group visitors about the role of this Subcommittee, its members, the list of questions which serve as the framework for the Subcommittee's report, and a history of the Chernobyl studies. He explained that NCI does not include a role for public involvement because it views the Chernobyl studies as a research project. Belarus and Ukraine view these studies as a public health project and plan to inform the public of the results when completed. There was some discussion about the barriers to public involvement in those countries.

In general, Dr. Matanoski questioned how the concept evolved that the Chernobyl studies were a research rather than a public health project, and suggested that they should have been a public health project from their conception. Other Subcommittee members agreed.

In addition, Dr. Matanoski has concerns about the feasibility of the thyroid studies based on their design and lack of fixed date of completion. She questioned what is meant by "long-term" and opined that epidemiology studies have fixed study dates. Furthermore, she does not agree with Dr. Howe's estimates of cohort enrollment.

Mr. Schletty reported that a first draft of the Subcommittee's report is anticipated on March 24. Observations and results from the site visits will be added later. Before submitting the report to ACERER, which will vote to accept or reject the final report on June 7, the Subcommittee will brief DOE, NCI, the Nuclear Regulatory Commission, and the Department of State.

#### Attachments:

- 1. List of ACERER Subcommittee Members
- 2. Draft Agenda of the ACERER Subcommittee for the Management Review of the Chernobyl Studies Meeting of February 24, 2000
- 3. Summary of the September 20, 1999 Meeting of the ACERER Subcommittee for the Management Review of the Chernobyl Studies
- 4. Key Time-Line Items and Status

#### ADVISORY COMMITTEE FOR ENERGY-RELATED EPIDEMIOLOGIC RESEARCH SUBCOMMITTEE FOR MANAGEMENT REVIEW OF THE CHERNOBYL STUDIES (SMRCS)

#### FEBRUARY 2000

#### **CHAIR**

#### **DESIGNATED FEDERAL OFFICIAL**

Genevieve M. Matanoski, M.D., Dr.P.H.
Professor, Department of Epidemiology
The Johns Hopkins University

Michael J. Sage, M.P.H.
Acting Deputy Director
National Center for Environmental Health

#### **MEMBERS**

Genevieve S. Roessler, Ph.D. Radiation Consultant

John R. Bagby, Ph.D. Private Consultant

Richard H. Schultz, M.S.
State Health Official
Idaho Department of Health and Welfare

#### 01/27/2000 DRAFT AGENDA\*

### ADVISORY COMMITTEE FOR ENERGY-RELATED EPIDEMIOLOGIC RESEARCH SUBCOMMITTEE FOR MANAGEMENT REVIEW OF THE CHERNOBYL STUDIES

Omni Shoreham Hotel 2500 Calvert Street, N.W. Washington, DC 20008 Phone: 202/234-0700

Thurso	<u>lay, F</u>	<u>ebruary 24, 2000</u>

8:30 a.m. - 8:45 a.m. Welcome & Introductions 8:45 a.m. - 10:30 a.m. Briefing to/Receiving Input from Public Interest Groups 10:15 a.m. - 10:30 a.m. Break Briefing to/Receiving Input from Public Interest Groups 10:30 a.m. - 11:30 a.m. (Continued) **Public Comment** 11:30 a.m. - 12:00 p.m. 12:00 p.m. - 1:15 p.m. Lunch Report on the Progress Review 1:15 p.m. - 2:15 p.m. 2:15 p.m. - 3:15 p.m. Discuss the Upcoming Trip to Ukraine and Belarus 3:15 p.m. - 3:30 p.m. **Public Comment** 3:30 p.m. Adjourn

<sup>\*</sup>Agenda Items and Times May Change as Priorities Dictate

# Advisory Committee for Energy-Related Epidemiologic Research Subcommittee for Management Review of the Chernobyl Studies Washington Court Hotel on Capitol Hill Washington, D.C.

SUMMARY OF MEETING Monday, September 20, 1999 9:30 a.m.

Subcommittee Chair: Dr. Genevieve Matanoski

Executive Secretary: Mr. Michael Sage

Dr. Genevieve Matanoski convened the third meeting of the Advisory Committee for Energy-Related Epidemiologic Research (ACERER), Subcommittee for Management Review of the Chernobyl Studies (SMRCS) at 9:31 a.m. on Monday, September 20, 1999, in the Capitol Room of the Washington Court Hotel in Washington, D.C. The following subcommittee members and agency representatives were in attendance:

Dr. Genevieve Matanoski, Chair, ACERER/SMRCS

Mr. Michael Sage, Executive Secretary, ACERER

Dr. John Bagby, Chair, ACERER

Dr. Genevieve Roessler, ACERER/SMRCS

Dr. Shelia Zahm, National Cancer Institute (NCI)

Dr. Elaine Ron, NCI

Dr. Robert Hoover, NCI

Ms. Kathleen Stine, NCI

Dr. Ihor Masnyk, NCI

Ms. Betsy Duane, NCI

Dr. Christie Eheman, National Center for Environmental Health (NCEH), Centers for Disease Control and Prevention (CDC)

Mr. Art Schletty, Contractor to NCEH, CDC

Ms. Priscilla Patin, NCEH, CDC

Dr. Jack Robbins, National Institutes of Health (NIH)

Mr. Barrett Fountos, Department of Energy (DOE)

Mr. Larry Elliott, National Institute for Occupational Safety and Health (NIOSH)

Motion carried to approve the minutes from the August 12, 1999, meeting pending corrections (mostly spelling and acronyms) and reserving the right to rescind approval

after a more detailed review of the minutes should any substantive changes be necessary. Any amendments to be made should be forwarded to Mr. Sage or Ms. Patin. The corrections will be distributed to all Subcommittee members.

Dr. Matanoski advised that Dr. Jack Geiger has resigned from this subcommittee for reasons related to his wife's illness. Given his expertise and background of the I-131 review done with Congress, she felt it might be appropriate to ask him to consult for the subcommittee on an ad hoc basis. Discussion of who might be a suitable replacement or even if a replacement is necessary was deferred until a later time.

#### **BRIEFING BY NCI STAFF**

Dr. Shelia Zahm began the NCI briefing by stating that NCI's review of the Chernobyl studies was being conducted by an oversight panel comprised of epidemiologists and other key personnel within the Institute including a member of the NCI Board of Scientific Counselors. In January they started reviewing the project to see how it has been managed and how it can be improved. They have already made some recommendations for changes which are being implemented. Based on the history of the project and what they have observed in the past nine months, the NCI is making recommendations for "fundamental changes in design, management, and field operations."

Dr. Zahm identified the following key people involved in the project: Gilbert Beebe, Ph.D., epidemiologist; Andre Bouville, Ph.D., dosimetrist; Ihor Masnyk, Ph.D., Project Director; Kathleen Stine, MBA, program analyst and co-project officer for the Columbia contract; Elaine Ron, PhD, Chief of the Radiation Epidemiology Branch; Robert Hoover, M.D., Epidemiology Program Director and lead epidemiologist on the Chernobyl Oversight Panel; Betsy Duane, Communications Coordinator, Division of Cancer Epidemiology and Genetics (DCEG); and Jacob Robbins, M.D., Scientist Emeritus at National Institute of Diabetes and Digestive and Kidney Diseases, who has been involved in these projects from their inception. Bruce Wachhloz, Ph.D., former Project Director, remains a valuable resource to the projects.

Some of the reasons for NCI's involvement in the Chernobyl studies include the following:

- lack of knowledge about the effects of I-131 and its role in neoplasia, thyroid cancer, and thyroid disease;
- to establish the role of I-131 in thyroid cancer; and
- Congressional concern regarding effects of fallout.

The transfer of responsibility from DOE to NCI was made to ensure appropriate scientific oversight of the project. At that time there were only a small number of epidemiologists and statisticians involved in the project; now there is a full team in place that is appropriate for a project of this magnitude, which is now located in the Division where cancer epidemiologic research is conducted at NCI.

The project has outgrown the "extramural grants mentality" under which it had originally been operating. NCI's need for closer supervision of staff and resources, particularly in light of the controversial nature of the studies and the public health implications, prompted the Institute's move toward more direct management. It also positions staff to respond "quickly to concerns of subcommittees like these."

Dr. Zahm notes that the clinical work, the quality of care, and the laboratory efforts are very good, and that there is a team in place to help improve field operations. She acknowledges that the Ukraine and Belarus governments are independently running the Chernobyl studies, that their finance system differs greatly from that of the United States, and that some of their scientific interests differ as well. For example, the screening protocol has been extremely ambitious. NCI has invited Ukrainian and Belarusian collaborators to a meeting in the United States in November to address these protocol issues, and to evaluate every component to see which ones they should continue, by whom, and at what intervals. NCI needs to make decisions consciously and responsibly with respect to the use of its staff and funding. Currently, any changes in scientific protocols would have to be approved by the Binational Advisors.

In response to a question regarding the strength of the dosimetry database, Dr. Ron advised that an international dosimetry committee had been formed, and that the dosimetrists are working together to validate the data from Chernobyl. Their next meeting is in Lyons in October. A new method of monitoring has been proposed and is under consideration. Dr. Ron reported that they do have some physical measurements and were able to start out "much further ahead compared to some other studies." They look at food intake, particularly milk intake, where the people were, and how long they were outside. Dr. Matanoski asked if NCI had considered an independent evaluation of the dosimetry data. Dr. Zahm agreed that it was a good idea.

Dr. Ihor Masnyk provided an overview of the management history. DOE delegated scientific responsibility to NCI, and authority was initially established through committees from "both sides of the ocean." Early requests from Belarus and Ukraine for assistance were essentially for computers and manpower, and were unrealistic. NCI had little involvement in the financial arrangements at that time, but the arrangements provided for a minimum staff, one at the technical level and one at the professional level.

There were annual negotiations for more people and more money. In the beginning each country was to support its own activity, but the governments were in flux, and people did not get paid for six to nine months at a time. Consequently, NCI agreed to a level of support in order not to lose people they had already trained.

NCI's formal involvement began with the signing of the documents in 1992. (Dr. Ron referred the Subcommittee to the Organization Chart in the binder.) Dr. Masnyk continued, saying that agreements and protocols for research were signed in 1994 in Belarus and in 1995 in the Ukraine. The time lag is attributed essentially to delays in translating all the documents and to unusual delays in obtaining signatures from the Belarus and Ukraine Ministries of Health and the US Secretary of State. Internally, there were management issues to be resolved between NCI and DOE, most notably with respect to procurement and inventory operations. With the Columbia contract, there is now a standardized procurement system in place. They have caught up on the backlog of deliveries that had not been made and are now approaching a new phase where things are running smoothly. The next step will be to eliminate huge delivery costs. The Belarusians would like to affiliate with STCU; they are tax exempt, have the power to clear things through customs, and have a capable monitoring system.

"When the agreement was first signed by DOE in 1996, 1997, the collegial approach was limited to advice with very small staff at NCI running the day-to-day operations," said Dr. Masnyk. "We were trying to make decisions in a more responsive way without worrying about the minutia." Now with the full support of the Ministries and staff all the way to the Director of NCI and with funds available, a management plan has been prepared for the next two years to plot "where we go and how." They have also sketched a three-year milestone plan. Site visits have been changed from the huge plenary sessions four times a year for five days to more frequent and focused visits with smaller groups.

Dr. Zahm affirmed the vast improvements in administration. However, sometimes decisions are made overseas that impact the study, such as moving an operation from one place to an inadequate facility. Another management area that has been particularly problematic is the high level of staff and political turnover in Ukraine and Belarus. She added that currently the Binational Advisory Groups have broad decision-making powers. A change has been recommended to eliminate their decision-making powers but to retain their advisory role. The working groups will address this issue when they meet in the Fall. The final decision resides with Dr. Richard Klausner, NCI Director.

Dr. Zahm also pointed out that the Projects' move to DCEG has created confusion in terms of the line of authority for the collaborators. She expects that when they meet in the Fall it will give them a chance to clarify roles; the smaller, more frequent visits overseas will help, too. An increase in funding has enabled Columbia to hire two new Ukrainian and Russian-speaking epidemiologists to work on site.

The Subcommittee asked NCI to provide a detailed chronology of the interplay that took place since the initial requests were made in 1986 and 1987, to outline the time lines and describe how they were renegotiated. It will be extremely helpful to describe circumstances that contributed to delays, logistical problems (e.g., how money is delivered to the Ukraine), changes of Health Ministers, changes in the governments, meetings, even attitudes or changes in attitude. It is important to provide history that will document how the activities progressed from one stage to the next.

In terms of the thyroid studies, Dr. Robbins reported that the ultrasound work is very good; the pathology work is reviewed by international groups, and the accuracy is equivalent to that achieved in the United States; and diagnosing thyroid cancer is quite reliable. The scientific problem is that the protocol does not specify when to perform biopsies and then whether to perform surgery. In epidemiologic studies it is necessary to dissociate the knowledge of radiation history, which requires a uniform standard for making diagnosis. An operations manual has been completed, which specifies clinical decision-making, and this requires continual attention and updating as needs arise.

Dr. Robbins stated that in the earlier part of the protocol development, a number of tests were proposed which could not all be done with the available facilities. Much of that has been streamlined now. He felt that autoimmune thyroid disease and hypothyroidism should be included in the study, but noted that "since one causes the other, there is no way to separate." He felt it would be important to include parathyroid disease also, since external radiation is a known cause. While it may "open a can of worms," the way to find it is to look for hypocalciuria. He added that quality control is gradually being improved.

Dr. Zahm reported that field operations are under scrutiny. Columbia staff studied these closely in one area and reported that field staff were unclear on the purpose of the study and its requirements and could not communicate that to the subjects. Columbia also reported extremely difficult conditions (no water, electricity or heat) where the screening was taking place. Their report not only identified the need to retrain recruiters and interviewers, but also raised participation issues and the potential for bias in the studies.

Dr. Masnyk stated that many people do not come for screening. There could be compensation for study participants in one country but not in another. Liquidators who came in for a few days in 1999 were compensated, for example, whereas those who were directly exposed earlier were not. Dr. Zahm said they have established relationships with other groups who also offer screening programs and have begun to compare prevalence estimates. Dr. Hoover felt they had baseline information for many participants, which is good. Only if the response rate is low, will bias really become an issue. Dr. Zahm is hopeful that they will have 12,000 participants. The goal is to have 15,000 by the end of the year 2000. Dr. Masnyk noted that in the Ukraine they recently identified two more sources with addresses: taxation and passport records. In Belarus they have finally agreed to open a center in Gomel, which should offer an incentive for participation by reducing travel distance.

Dr. Ron reported that as the leukemia project is a feasibility study, there hasn't been as much focus on it as on the thyroid studies. However, in terms of the science she said it is a very relevant study of nuclear workers who received extremely low doses of radiation. So far, the results are inconsistent, but a final report of this pilot study is due in November. NCI will be meeting with the leukemia study working group and the NCI's Chernobyl Oversight Panel to review the report. A recommendation for the need for further study is expected to be made by January 2000.

Dr. Ron advised that the data belongs to the Ukrainian and Belarusian governments. They do not have the data at NCI, which is not only problematic but will be difficult to renegotiate. She acknowledged the need for quality control review and a better sense of what's happening on a day-to-day basis. Dr. Masnyk pointed out that quality control is a very difficult concept to sell because of cultural differences. He clarified that the Director, who is appointed by the Ministry, is in charge of the data and responsible for its release. The screeners will not part with the data. In addition, the subjects are concerned that it be entered in their individual medical records; in Belarus, the subjects copy every single piece of paper.

Dr. Matanoski said it would be helpful to indicate that Belarus and Ukraine are responsible for their own quality control and to describe what that entails. She raised a question concerning auditing procedures for quality control, and Dr. Hoover replied that Columbia is introducing audit procedures and that their first report was very helpful. It is not yet generalizable, but it clearly indicated "that things were not in the spirit of the protocol." The two new epidemiologists will also help with auditing.

Dr. Masnyk pointed out that the Ukrainians have not yet computerized much data. This affords an opportunity to have a professional team set it up "exactly as we would like."

No dual entry has been made until now. Columbia just hired a Russian-speaking computer programmer, and so far efforts are aimed at discovering what the problems are and trying to solve them. What is needed is a system to see what the error rate is.

With respect to community input, the NCI panel replied that because these studies constitute Ukraine and Belarus state projects, the concept of public involvement is alien to the traditional rule of authority in these countries. There is, however, more focus now in communicating back to people who have come to be screened, and a newsletter has been proposed for this purpose.

#### **REVIEW OF NCI DOCUMENTATION**

Mr. Art Schletty and Ms. Betsy Duane have looked through 10 to 15 boxes of documents and pulled the vast majority on what related to Chernobyl. If they felt the documents were not relevant, they marked them as having been reviewed but not selected. Ms. Duane is currently in the process of copying the relevant documents. What remains to be done is to identify post-hearing documents that are critical to the Subcommittee's evaluation and assessment. Mr. Schletty asked the Subcommittee if they would like to authorize him "to do an initial sort and provide you with annotated notes on some of the materials to help you review the most pertinent documents." The Subcommittee accepted this proposal. Mr. Schletty will keep an inventory of everything that he does not send. If the Subcommittee review raises issues not covered in the documents that are sent to the Subcommittee, the documents related to those issues can then be retrieved. Dr. Matanoski added that it will be important to indicate the different levels of review in the Subcommittee's report.

The Subcommittee agreed that Ms. Duane should ship the documents on a weekly basis as they are ready; historical information first, then post-hearing information. Every Subcommittee member should receive the same set of documents for review. Ms. Duane should sort them chronologically.

#### PREPARATIONS FOR NOVEMBER MEETING

The Subcommittee discussed how they would like to set up the interviews of selected attendees from Belarus and Ukraine at the November 11 meeting and agreed on the following parameters:

1. Mike Sage should arrange to send a letter to NCI formally requesting the Subcommittee meet with the Ukrainian and Belarusian attendees. A "one-pager" should also be sent to NCI that provides background on the

Subcommittee members as well as the purpose of the November 11 interviews that can be provided to the Ukrainian and Belarusian attendees in advance of the November 11 meeting. Ms. Duane agreed to have this "one-pager" translated.

- 2. On November 11, meet with both Ukrainian and Belarussian representatives, including one each representing expertise in policy/management, clinical medicine, epidemiology, and dosimetry (the most senior person from each project);
- 3. Ensure that the most senior person on each project is interviewed by an ACERER member;
- 4. Use simultaneous translation services;
- 5. Use partitions in the meeting room;
- 6. Set the morning orientation from 9:00-10:00 (to introduce Subcommittee members and explain Subcommittee's role and activities, the kinds of questions it needs information on, areas it needs to examine), the first interviews from 10:30-12:00, the second interviews from 1:00-2:30, and then a short session from 2:30-3:00 to say thank you and invite future contact;
- 7. Postpone interviews with Columbia and NCI staff until after these interviews and a thorough review of the documents are completed;
- 8. Dr. James Smith, NCEH, CDC, should be invited by NCI to attend the entire meeting.

Remaining tasks include: read all the material, set out the Subcommittee's explanation of what it hopes to accomplish and a few general interview-type questions, then decide on who will interview whom. Dr. Matanoski requested a conference call prior to November 11 to discuss the upcoming meeting, finalize discussion issues with the scientists and review documentation. For presentation at the ACERER meeting, the Subcommittee will probably need staff support and another conference call before the December meeting.

#### **PRODUCTS**

Mr. Schletty has prepared a draft outline for the final report (a copy was distributed to all the Subcommittee members). Mr. Sage suggested that the time line and the list of documents that were reviewed could be included in the Appendices. A point of clarification with respect to III. A. Nature and Extent of Public Involvement: this should refer to involvement in this review, not to the studies. This is an outstanding issue that needs more attention. The Subcommittee members agreed to each note their own ideas, submit them to Dr. Geiger to review, and then go from there.

#### AGENDA FOR FUTURE MEETINGS

Mr. Sage will send out a calendar for January and February. It was requested that Mr. Schletty develop the outline further to elicit feedback from the group (much can be done over the phone). Then the Subcommittee can begin to divide up the writing tasks.

The meeting was adjourned at 3:55 p.m.

I hereby certify that, to the best of my knowledge, the foregoing Minutes are accurate and complete.

Genevieve Matanoski, M.D., Dr.P.H.
Chair
Date

## SUBCOMMITTEE FOR MANAGEMENT REVIEW OF THE CHERNOBYL STUDIES KEY TIME-LINE ITEMS AND STATUS

#### **Hold SMRCS Meeting in August 1999**

-Purpose: Agree on scope of the review, review and discuss questions to be addressed in the review, and determine documentation and other information needed to complete the review.

-Status: Accomplished. The Subcommittee for Management Review of the Chernobyl Studies (SMRCS) met on August 12, 1999. Affirmed that the broad scope of the review would include identifying the challenges and opportunities faced by Ukrainian, Belarusian, and National Center Institute (NCI) scientists in carrying out the thyroid and leukemia studies in Ukraine (UA) and Belarus (BY); determining the type and amount of input and involvement from local leaders and the public in these studies; and characterizing the nature and extent of the collaboration among UA, BY, and NCI scientists and NCI's US collaborators. Reviewed and adopted the document, "Draft Basic Questions for a Scientific and Management Review of the Thyroid and Leukemia Studies Being Conducted by the United States and the Governments of Belarus and Ukraine (attached)," developed by and provided to SMRCS by Dr. William F. Raub, Deputy Assistant Secretary, Office of Science Policy, Department of Health and Human Services (HHS). SMRCS presented NCI staff attending this meeting with a list of materials required by SMRCS from NCI to answer these questions. NCI also agreed to identify all NCI historical documents in its possession that address its Chernobyl studies and provide copies of them to SMRCS for review and analysis.

Note: On August 30-31, 1999, SMRCS support staff at the Centers for Disease Control and Prevention (CDC) met with NCI headquarters staff to identify Chernobyl documents among the numerous boxes of US fallout and Chernobyl documents that had been submitted in 1998 to the Permanent Subcommittee on Investigations, Committee on Governmental Affairs, US Senate. Many thousands of pages of Chernobyl documents were identified, copied by NCI, and sent to CDC for organizing and annotation. Chernobyl documents are then sent to SMRCS for their review and analysis.

Began assembling a list of key individuals (NCI and other) associated with its Chernobyl projects-these people will be interviewed by SMRCS.

#### **Hold SMRCS Meeting in September 1999**

-Purpose: Receive briefing from NCI management and scientists on the background and current statues of the NCI Chernobyl studies.

-Status: SMRCS met on September 20, 1999, and received briefing from Dr. Shelia Zahm, Deputy Director, Division of Cancer Epidemiology and Genetics, NCI, and key NCI scientists. During this briefing, NCI indicated that it was holding an "International Meeting on Collaborative Chernobyl Thyroid Research Projects" on November 8-10, 1999, in Washington, D.C., and that many of the key UA and BY scientists working on the thyroid studies would be

present at this meeting. NCI offered to extend the meeting one day so that SMRCS would be able to take advantage of this unique opportunity to meet and interview key UA and BY staff as well as to lay the groundwork with them for the planned SMRCS site visit to UA and BY scheduled for April 2000.

Other key tasks scheduled for the previously planned November SMRCS meeting (e.g., to discuss the status of document review and decide on general outline of the final report) were addressed during this September meeting.

#### **Hold SMRCS Meeting in November 1999**

-As noted above, SMRCS took advantage of the opportunity to meet and interview Ukrainian and Belarusian scientists in November in lieu of this scheduled SMRCS meeting. SMRCS conducted individual interviews with the Project Directors of the UA and BY thyroid studies plus 4 senior scientists from each project. SMRCS obtained useful information on the scientific and management dynamics of the studies and made invaluable contacts for its planned site visit to UA and BY in March 2000.

## Provide Briefing to Full ACERER and the ACERER Subcommittee for Community Affairs on December 14-16, 1999

-Status: Briefings provided at the full ACERER meeting that included members of the Subcommittee for Community Affairs.

#### **Hold SMRCS Meeting in January 2000**

- -Purpose: Provide briefing to and solicit input from representatives of public interest groups.
- -Status: Combined January and February meetings to be held on February 24, 2000.

#### **Hold SMRCS Meeting in February 2000**

- -Purpose: Review progress of documents reviews and discuss other matters relevant to the SMRCS review.
- -Status: As noted, held on February 24.

#### SMRCS to Conduct Site Visit to UA and BY in March 2000

-Status: Scheduled for April 9-22, 2000.

## <u>Provide Briefing to Full ACERER and the ACERER Subcommittee for Community Affairs in April 2000</u>

-Purpose: To review and discuss progress on the draft report and obtain ACERER and Subcommittee input on draft final report.

May 2000-Deliver SMRCS Report to HHS